CLAIMS

1. A protein consisting of an amino acid sequence represented by SEQ ID NO:1, or a salt thereof.

2. A protein consisting of an amino acid sequence represented by any one of SEQ ID NOS:3, 5, and 7, or a salt thereof.

3. A protein having an amino acid sequence derived from an amino acid sequence represented by SEQ ID NO:5 by deletion of 0 to 10 amino acid residues from the N-terminal and deletion of 0 to 5 amino acid residues from the C-terminal and having 92 to 106 amino acid residues, or a salt thereof.

4. A protein consisting of an amino acid sequence derived from an amino acid sequence of a proteins according to any one of claims 1, 2, and 3 and having deletion, substitution or addition of one to several amino acids and having a function substantially identical with that of the protein according to claim 1, 2, or 3, or a salt thereof.

5. A polynucleotide comprising a polynucleotide encoding an amino acid sequence of any one of proteins according to claims 1 to 4.

6. The polynucleotide according to claim 5, containing a nucleotide sequence represented by any one of SEQ ID NOS: 2, 4, 6, and 8.

7. A recombinant vector containing a polynucleotide according to claim 5 or 6.

8 A transformant which is transformed with a polynucleotide according to claim 5 or 6.

9. An antibody against a protein according to any one of claims 1 to 4.

10. A method for producing a protein or a salt thereof according to any one of claims 1 to 4, comprising the steps of culturing the transformant of claim 8 and producing the protein.

11. A method for producing a protein or a salt thereof according to any one of claims 1 to 4, characterized by using a cell-free protein synthesis system.

12. A method for screening a substance interacting with a protein or a salt thereof according to any one of claims 1 to 4 and/or a naturally existing protein or a salt thereof containing an amino acid sequence of a protein according to any one of claims 1 to 4, comprising the steps of bringing a candidate substance into contact with the protein of any one of claims 1 to 4; and confirming whether the candidate substance interacts with the protein.

13. A method for assaying a protein or a salt thereof according to any one of claims 1 to 4 using an antibody of claim 9.

14. A method for screening a substance interacting with a protein or a salt thereof according to any one of claims 1 to 4 using an assay method of claim 13.

15. A method for specifying a gene associated with a protein according to any one of claims 1 to 4, comprising the steps of expressing the protein according to any one of claims 1 to 4 in a cell; and examining an expression status of the gene in the cell.

16. A method for screening a substance interacting with a protein or a salt thereof according to any one of claims 1 to 4 and/or a naturally existing protein or a salt thereof containing an amino acid sequence of a protein according to any one of claims 1 to 4, comprising the steps of determining an active site of the protein using information concerning three-dimensional structure of the protein according to any one of claims 1 to 4; and specifying a compound interacting with the active site on a computer.

17. The screening method according to claim 16, wherein the information concerning three-dimensional structure of the protein is three-dimensional structure information of a protein consisting of amino acid residues from amino acid 8 to amino acid 98 among three-dimensional structure information described in any of three-dimensional structure coordinate tables 1 to 20.

18. The screening method according to claim 17, wherein, among three-dimensional structure information described in three-dimensional structure coordinate table 1, a part of information corresponding to amino acid residues (Val26, Lys27, Glu47, Arg67, Lys83 and Ser86) is used.

19. A method for screening a substance interacting with a protein or a salt thereof according to any one of claims 1 to 4 and/or a naturally existing protein or a salt thereof containing an amino acid sequence of a protein according to any one of claims 1 to 4, wherein a compound interacting with a specified active site is prepared as a candidate compound by a screening method according to any one of claims 16 to 18, the method comprising the steps of bringing the candidate substance into contact with a protein according to any one of claims 1 to 4; and confirming whether the candidate substance has interaction with the protein.

20. A method for presuming a three-dimensional structure of a protein with an unknown structure, wherein homology modeling is conducted on the protein with an unknown structure comprising an amino acid sequence having 30% or more homology with an amino acid sequence of a protein according to any one of claims 1 to 4, by using information concerning three-dimensional structure information of a protein having amino acid residues from amino acid 8 to amino acid 98 among three-dimensional structures of a protein described in any of three-dimensional structure coordinate tables 1 to 20.